

# Building a Smarter Fuel Cycle Inspection Program

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# Purpose

- Overview of working group charter
- Summary of working group charter tasking
- Brainstorming and Scoping Workshop
  - NRC Perspectives

# Working Group (WG) Charter

- April 26, 2019 – NRC staff issued the Charter ([ML19074A139](#))
- Conduct holistic assessment of Fuel Cycle inspection program
  - Improve effectiveness and efficiency of program inspections
- Look for areas of transformation and innovation while adhering to the NRC Principles of Good Regulations

# Fuel Cycle Inspection Program

- Purpose: determine that facilities are operating safely and securely and in accordance with regulations
- Identify indications of declining safety or safeguards performance
- Applies to fuel fabrication facilities, uranium enrichment plants, and uranium conversion plants

# Fuel Cycle Inspection Program

- Inspection Manual Chapter (IMC) 2600 “Fuel Cycle Facility Operational Safety and Safeguards Inspection Program”
  - Core inspection effort
  - Reactive, supplemental, and generic safety issue inspections
  - Implemented through inspection procedures (IPs)
  - Resident inspectors are assigned to Category I fuel cycle facilities

# Summary of Tasking

- Engage stakeholders for feedback
  - Active engagement is the key for success
    - Broad range of ideas
    - Transformation and Innovation
- Assessment of Inspection and Support Procedures
- Develop and evaluate recommendations
- Develop report with conclusions and recommendations

# Summary of Tasking

- Evaluate changes with regards to our mission and [NRC Principles of Good Regulations](#)
  - Independence
  - Clarity
  - Openness
  - Reliability
  - Efficiency

# Proposed Schedule

| Activity  | Target Date    |
|---|----------------|
| <b>Introduction of Initiative at the NRC Regulatory Information Conference</b>  | 03/13/19       |
| <b>Issue Charter</b>  | April 26, 2019 |
| <b>Conduct Public Meeting #1:</b> Discuss the NRC Charter, communicate ideas for collaboration, and future meetings.  | April 3, 2019  |
| <b>Conduct Public Meeting #2:</b> Interactive workshop for stakeholders to provide areas for potential improvement for the Fuel Cycle Inspection Program. To facilitate this discussion, the working group should update the public website ( <a href="https://www.nrc.gov/materials/fuel-cycle-fac/public-involve.html#effects">https://www.nrc.gov/materials/fuel-cycle-fac/public-involve.html#effects</a> ) one week prior to this workshop with presentation materials.  | May 2019       |
| Evaluation of Overlaps and areas of enhancement   | May 31, 2019   |
| <b>Conduct Public Meeting #3:</b> Present draft results of overlaps and areas of enhancement, present and gather preliminary ideas for further consideration. To facilitate this discussion, the working group should update the public website ( <a href="https://www.nrc.gov/materials/fuel-cycle-fac/public-involve.html#effects">https://www.nrc.gov/materials/fuel-cycle-fac/public-involve.html#effects</a> ) three weeks prior to this workshop with presentation materials. One week prior to this workshop, stakeholders are requested to provide to the NRC contacts listed below, their perspectives and feedback on the presentation materials. | July 2019      |



# Proposed Schedule

|   |                            |
|---|----------------------------|
| Develop draft report with identification of enhancements to program.<br>Develop slides from draft report to present at Public Meeting #3.   | September 2019             |
| <b><u>Conduct Public Meeting #4:</u></b> Discuss draft proposed enhancements to inspection program and gather feedback on proposed enhancements. Discuss timeline for implementation. To facilitate this discussion, the working group should update the public website ( <a href="https://www.nrc.gov/materials/fuel-cycle-fac/public-involve.html#effects">https://www.nrc.gov/materials/fuel-cycle-fac/public-involve.html#effects</a> ) three weeks prior to this workshop with presentation materials. One week prior to this workshop, stakeholders are requested to provide to the NRC contacts listed below, their perspectives and feedback on the presentation materials. | September 2019             |
| Issuance of report  | November 2019              |
| Implementation of enhanced program  | Calendar Year<br>2020-2021 |

# Questions



# Brainstorming and Scoping Workshop



# NRC Perspectives

- Improve efficiency and effectiveness of inspection procedures
  - Determine if overlap exists between inspection procedures (examples)
    - Operational Safety and Maintenance and Surveillance of Safety Controls
    - Operational Safety and Fire Protection (Annual)
  - Review frequency of inspections
    - Fire Protection – annual vs triennial procedures
  - Review roles and responsibilities of Senior Resident Inspectors

# NRC Perspectives

- Accomplish agency goals more efficient and effectively
  - IMC 2600 Appendix B
  - Review frequency of Core Inspection Areas
  - Estimated Resources per inspection procedure

| Safety Operations  | Radiological Controls    | Facility Support              | Safeguards                       |
|--------------------|--------------------------|-------------------------------|----------------------------------|
| Plant Operations   | Radiation Protection     | Maintenance/Surveillance      | Material, Control and Accounting |
| Criticality Safety | Environmental Protection | Emergency Preparedness        | Physical Protection              |
| Fire Protection    | Waste Management         | Permanent Plant Modifications | Information Security             |
|                    | Transportation           |                               |                                  |